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| EXAMINER |
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WEISSMAN, JOSEPH M

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4135

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|---------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/552,823 | Applicant(s) PAUCKER ET AL. | |
| | Examiner Joseph M. Weissman | Art Unit 4135 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-12, 14-19 is/are rejected.
- 7) ☒ Claim(s) 5-9 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07 October 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 5 is objected to because the term “**the concave hollow surface**” has no antecedent basis of a concave hollow surface.

Claim 5 is objected to because the term “**longitudinal extent**” is indefinite in that it fails to point out what is included or excluded by the claim language.

Claim 8 is objected to because the terms “**concave hollow surface**” and “**transverse end web**” have no antecedent basis of transverse webs or a concave hollow surface. It is assumed by the examiner that the limitation for the “**transverse end web**” is the same as the limitation found in claim 5.

Claim 9 is objected to because the terms “**transverse end webs**” and “**concave hollow surface**” have no antecedent basis of transverse webs or a concave hollow surface. It is assumed by the examiner that the limitation for the “**transverse end web**” is the same as the limitation found in claim 5.

Claim 13 is objected to because the terms “**the recesses**” and “**the centering projections**” have no antecedent basis of recesses or centering projections. It is

assumed by the examiner that the limitations are the same as the limitations found in claim 12.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 ~ 4, 10, 11, 15, 18, 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama et al., US Patent No. 5,713,674.

Nakayama et al. (Figures 33, column 31 lines 1 ~ 33 and column 32 lines 18 ~ 46) discloses claim **1, a printer comprising:**

an elongate media output port (Figure 33 shows sheet S, media, conveyed in the direction A away from the printing impact head 604 and out of the printer. The media output port is then defined as the region between L-shaped grooves 622 and upper casing 601, column 31 lines 1 ~ 33) **with at least one bearing surface** (Cover member 606, figure 33, column 32 line 18) **arranged to delimits the media output port in a transverse direction and along which printing medium slides during output** (Nakayama et al. discloses cover member 606 comes into contact with flap 608 (labeled in Figure 34 and unlabeled in Figure 33), delimiting the output port, and lightly

pushes the flap 608 upwards, transverse to the direction A of sheet S, figure 33, column 32 lines 18 ~ 19 and lines 27 ~ 29)

wherein the media output port comprises an elongate sealing closure (Flap 608, figure 33 (labeled in figure 34), column 32 line 18) **arranged to be movable in the transverse direction** (Nakayama et al. discloses cover member 606 comes into contact with flap 608, delimiting the output port, and lightly pushes the flap 608 upwards, transverse to the direction A of sheet S, column 32 lines 18 ~ 19 and lines 27 ~ 29) **and press elastically against the bearing surface** (Nakayama et al. discloses flap 608 is flexible, thereby elastic, so when it is lightly pushed upward by the cover member 606 it is pressing down on cover member 606, column 32 lines 44 ~ 46) **by means of a sealing feed guide** (Contact point of flap 608 with cover member 606, figure 33, column 32 line 18), **so as to close the media output port, and**

wherein the printing medium is capable of being outputted between the bearing surface and the sealing closure in an output direction (Nakayama et al. discloses the sheet S is ejected, or outputted, between the cover member 606 and flap 608, Column 32 lines 27 ~ 29).

The claim stating the intended use of “**a printer for a digital tachograph for a motor vehicle**” has not been given patentable weight. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1674 (1987).

Nakayama et al. (Figure 33, column 32 lines 18 and 44 ~ 46) discloses **the printer according to claim 1**, and **claim 2, wherein the sealing closure** (Flap 608, figure 33, column 32 line 18) **comprises an elastic seal** (Nakayama et al. discloses flap 608 is flexible, thereby elastic, figure 33, column 32 lines 45 ~ 46) **with an elastic sealing lip** (Figure 33 shows the flap 608 where the sealing lip being is the end portion of the flap 608 where it contacts the cover member 606, column 32 lines 44 ~ 46) **which presses elastically against the bearing surface** (Nakayama et al. discloses flap 608 is flexible, thereby elastic, so when it is lightly pushed upward by the cover member 606 it is pressing down on cover member 606, column 32 lines 44 ~ 46).

Nakayama et al. (Figure 33, column 32 line 18) discloses **the printer according to claim 2** and **claim 3, wherein the seal** (Flap 608, figure 33 (labeled in figure 34), column 32 line 18) **has an at least partially sickle-shaped cross-sectional profile, a convex side of the cross-sectional profile pointing opposite to the output direction of the printing medium** (Nakayama et al figure 33 shows the flap 608, the seal, as partially sickle-shaped with the convex side of the cross-sectional profile pointing opposite the sheet S direction A, column 32 line 18).

Nakayama et al. (Figure 39, column 32 lines 41 ~ 42) discloses **the printer according to claim 2** and **claim 4, wherein the seal** (Upper roller 652, figure 39, column 33 lines 41 ~ 42) **comprises a hollow profile** (Long hole 655, figure 39, column 33 line 42), **and a cavity-surrounding wall** (The surrounding wall around long hole 655

of the upper roller 652, figure 39, column 33 lines 41 ~ 42) **having a circular form.**

Nakayama et al. (Figure 36, column 33 lines 11 ~ 17) discloses **the printer according to claim 2, and claim 10, wherein the seal** (Flap 608, figure 36, column 33 line 11) **comprises two components having different hardnesses, a softer component** (Flap 608, figure 36, column 33 line 11) **being arranged in a region of a sealing feed guide** (Contact point of flap 608 with surface sheet S is conveyed on, figure 36, column 33 lines 11 ~ 15) **and a harder component** (Elastic member 683, figure 36, column 33 line 12) **being arranged essentially in a region of fastening of the seal** (Contact point of the elastic member 683 with the shaded region representing the printing casing portion, figure 36, column 33 line 12). Nakayama et al. discloses the pressing force on sheet S can adjust the intensity by the elasticity of the elastic member 683, it is then conceivable that a stronger force requirement will require a stiffer elastic member which is potentially harder than the flexibility of the flap 608.

Nakayama et al. (Figures 33, column 31 lines 1 ~ 33 and column 32 lines 18 and 51) discloses **the printer according to claim 2, and claim 11, wherein the seal** (Flap 608, figure 33 (Labeled in figure 34), column 32 line 18) **is fastened to a boundary of the paper output port in a region located opposite the bearing surface** (Cover member 606, figure 33, column 32 line 18). Nakayama et al. discloses flap 608 is connected with the casing portion, represented by the shaded region above flap 608, opposite the cover member 606, the bearing surface, figure 33 column 32 line 51.

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Figure 33 then shows the casing portion from figure 35(a) adjacent to the sheet S output port, defined as the region between L-shaped grooves 622 and upper casing 601, column 31 lines 1 ~ 33, therefore the casing portion is a boundary of the paper output port.

Nakayama et al. (Figure 37, column 32 lines 44 ~ 46 and column 33 lines 19 ~ 23) discloses **the printer according to claim 1, and claim 15, wherein the sealing closure** (Flap 608, figure 37, column 33 line 19) **is a resilient sealing closure** (Nakayama et al. discloses flap 608 is flexible, thus capable of flexing to and from it's original position, figure 37, column 32 lines 44 ~ 46), **with a leaf spring portion** (Leaf spring 685, figure 37, column 33 line 23) **designed as a leaf spring and which has adjoining it a closing portion** (Flap 608, figure 37, column 33 line 19) **having an essentially rigid bearing edge which bears against the bearing surface** (Surface sheet S is conveyed on, figure 37, column 33 line 21) **by means of a sealing feed guide** (Contact point of flap 608 with the surface sheet S is conveyed on, figure 37, column 33 lines 19 ~ 21), **the leaf spring portion prestressing the closing portion elastically against the bearing surface** (Nakayama et al. discloses the leaf spring 685 in cooperation with the stopper 682, which is the back end of the flap 608, figure 37, column 33 line 21. Therefore a pressing force is applied by the leaf spring 685 onto the flap 608 against the coil spring 684 to apply pre-stressing force on the flap 608).

Nakayama et al. (Figure 37, column 33 lines 19 ~ 23) discloses **the printer according to claim 15, and claim 18, wherein the seal** (Flap 608, figure 37, column 33

line 19) **has, in a continuation opposite to the output direction, a sliding surface which adjoins the bearing edge and which forms an acute angle with the bearing surface** (Surface sheet S is conveyed on, figure 37, column 33 line 21) **at the sealing feed guide** (Contact point of the flap 608 with surface sheet S is conveyed on, figure 37, column 33 lines 19 ~ 21). Nakayama et al. figure 37 shows the section of the flap 608 extending from the surface sheet S is conveyed on to the pivot 681 forms an acute angle with the surface sheet S is conveyed on, column 33 lines 19 ~ 23.

Nakayama et al. (Figure 35(a), column 32 line 51 ~ column 33 line 2) discloses **the printer according to claim 15, and claim 19, wherein the seal is longer in a longitudinal direction than the output port** (Nakayama et al. discloses flap 608 closes the sheet opening, figure 35(a) (incorrectly labeled, refer to figure 35(b) for proper labeling), column 32 lines 51 ~ 52, and completely closes the opening, column 33 lines 1 ~ 2. It can be inferred that in order for the flap to cover the entire longitudinal length of the opening, it must be equal to or greater than the length of the opening itself.).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al., US Patent No. 5,713,674 as applied to claim 11 above, and further in view of Numagami et al., US Patent No. 6,266,500 B1.

Nakayama et al. (Figure 33, column 31 lines 1 ~ 33 and column 32 lines 18 ~ 46) discloses **the printer**, the seal, and sealing feed guide **according to claim 11**. Nakayama et al. does not disclose the seal guided by centering projections, but Numagami et al. does.

Numagami et al. (Figures 10 ~ 12, column 13 line 41 ~ column 14 line 42) teaches an embodiment for mounting a seal and claim **12, wherein the seal** (Developing blade 9d, figure 11, column 13 line 41) **is guided by means of centering projections** (Bosses 12i1 on each end of the developing blade 9d, figures 11 and 12, column 13 line 62) **and the seal is provided with recesses** (Round hole 9d3 in figure 11 and elongated hole 9d4 in figure 12, column 14 lines 13 ~ 14) **in a fastening region located opposite the sealing feed guide in the transverse direction** (Figure 10 shows the elastic blade 9d2 of the developing blade 9d in contact with the developing roller 9c, the contact point between the developing blade 9d and developing roller 9c

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being the sealing feed guide, and shows the mounting of the developing blade located opposite the developing roller 9c transverse to the directional arrow shown, column 13 line 46 ~ 48), **the centering projections being arranged in the recesses** (Figures 11 and 12 show the bosses 12i1 and guide lines showing the bosses leading through the round hole 9d3 and elongated hole 9d4 of the developing blade 9d, column 14 lines 13 ~ 14).

To one of ordinary skill in the art at the time of the invention, it would have been obvious to combine Nakayama et al.'s invention with Numagami et al.'s invention as a means to mount the sealing member for accurate positioning (Numagami et al., column 16 lines 1 ~ 9).

Nakayama et al. (Figures figures 33, column 31 lines 1 ~ 33 and column 32 lines 18 ~ 46) discloses **the printer**, the seal, and the fastening region **according to claim 12**. Nakayama et al. does not disclose the fastening component of the seal arranged for clamping, but Numagami et al. does.

Numagami et al. teaches an embodiment for mounting a seal and claim **14**, **further comprising a fastening component arranged to clamp the seal in the fastening region** (Figures 11 and 12 show a screw fastening the toner scraper member 15 to the blade mounting surface 12i where the developing blade 9d is clamped in between).

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al., US Patent No. 5,713,674 as applied to claim 15 above, and further in view of Buschulte et al., US PG Publication No. 2001/0032900 A1.

Nakayama et al. (Figure 37, column 33 lines 19 ~ 23) discloses **the printer according to claim 15**, and claim **16, a bearing surface** (surface sheet S is conveyed on, figure 37, column 33 line 21). Nakayama et al. does not mention **the bearing surface provided with a soft covering** but Buschulte et al. does.

Buschulte et al. teaches a discharge device 10 for discharging a web of printing material where the web travels between a sealing element 12, a bearing surface, and a roller 11. Buschulte et al. further teaches the sealing element 12 is a felt strip, a soft covering (figure 1, paragraph 0042).

To one of ordinary skill in the art at the time of the invention, it would have been obvious to combine Nakayama et al.'s invention with Buschulte et al.'s invention to provide a sealing element of Buschulte et al.'s invention at the output port Nakayama et al.'s invention to provide an economical means to avoid damage to the web of printing material from yellowing, moisture, and mechanical factors, assuring safe transport and safe storage (Buschulte et al. paragraph 0005).

Nakayama et al. (figure 37, column 33 lines 19 ~ 23) discloses **the printer according to claim 16**, but does not mention from claim **17, the soft covering**

comprises of felt. Buschulte et al. teaches the soft covering, sealing element 12, comprising of felt (figure 1, paragraph 0042).

Allowable Subject Matter

Claims 5 ~ 9 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 5 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including the seal comprising transverse end webs in the end regions of the concave hollow surface.

Claim 6 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including the **plane described by a transverse end web arranged obliquely to the transverse direction, so that said web forms an angle of between 30° and 85°, with a longitudinal axis of the seal.**

Claim 7 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including **the**

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distance between the transverse end webs located opposite one another at two ends increasing toward the sealing feed guide.

Claim 8 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including **further transverse web arranged in a concave hollow surface between a middle with respect to a longitudinal direction and a respective transverse end web, the further transverse web having an identical oblique position and arranged to run parallel to the transverse end web.**

Claim 9 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including **transverse end webs having in the region of their extent in the transverse direction, a complete and leak-tight tie-up to a concave hollow surface.**

Claim 13 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including **the recesses having, for the centering projections, fitting surfaces formed by a layer of the softer component on the harder component.**

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are as follows:

Shiozaki, Japan Patent No. 408111802A. Shiozaki teaches a printer with a paper roll guide at the paper roll discharge port.

Burkart, US Patent No. 6,437,815 B1. Burkart teaches a tachometer with a printer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph M. Weissman whose telephone number is (571) 270-5301. The examiner can normally be reached on Monday through Friday, 7:30am to 5:00pm EST with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Brewster can be reached on (571) 272-1854. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. M. W./
Examiner, Art Unit 4135

/William M. Brewster/
Supervisory Patent Examiner, Art Unit 4135